

ANT450D, D3, D6-9

DIPOLE AND DIPOLE ARRAY 1 TO 9 dBd

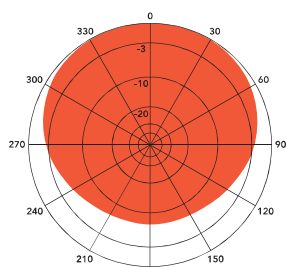
The Telewave ANT450D series consists of single, dual, and 4-element dipole array antennas with a precision phasing harness for optimum performance. The antenna horizontal pattern is field-adjustable, for any current or future coverage requirements. The wide bandwidth and high efficiency of these antennas make them ideal for many applications, including trunking, business, public safety, government, and amateur radio.

Each dipole element is constructed with 6061-T6 aluminum, and welded at the base for maximum strength. Each antenna is also completely sealed with our high-tech Txytan™ coating, which resists water and ice

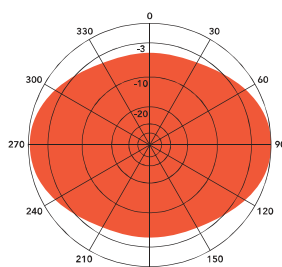
buildup, and provides exceptional protection from corrosive gases, UV radiation, salt spray, acid rain and windblown abrasives. The phasing harness is fully sealed by Telewave's Millenium Seal™ technology.

All components are at DC ground potential for lightning protection. Each dipole element includes a heavy-duty custom clamp set for mounting to a 1.5"-2.5" diameter galvanized steel support pipe or tower leg.

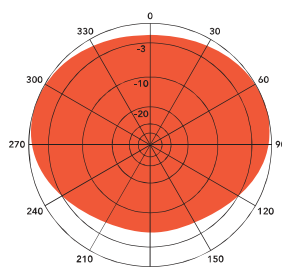
Up to 15 degrees of electrical uptilt or downtilt may be specified for D3 or D6-9 models. Desired tilt angle must be included on the order, and consultation with our antenna engineering staff is requested.



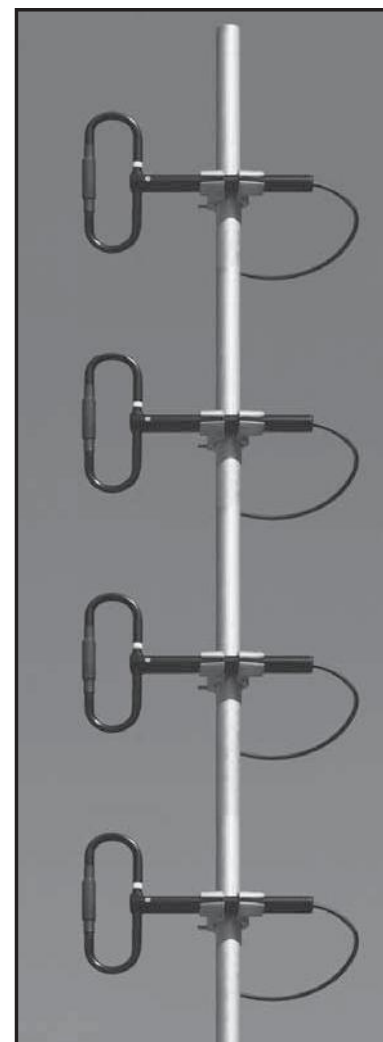
H-Plane gain 9.1 dBd
1/4 wl. spacing from tower



H-Plane gain 9.1 dBd
1/2 wl. spacing from tower



H-Plane gain 8.5 dBd
3/8 wl. spacing from tower



ANT450D6-9
(Harness not shown)
Support mast is
customer-supplied

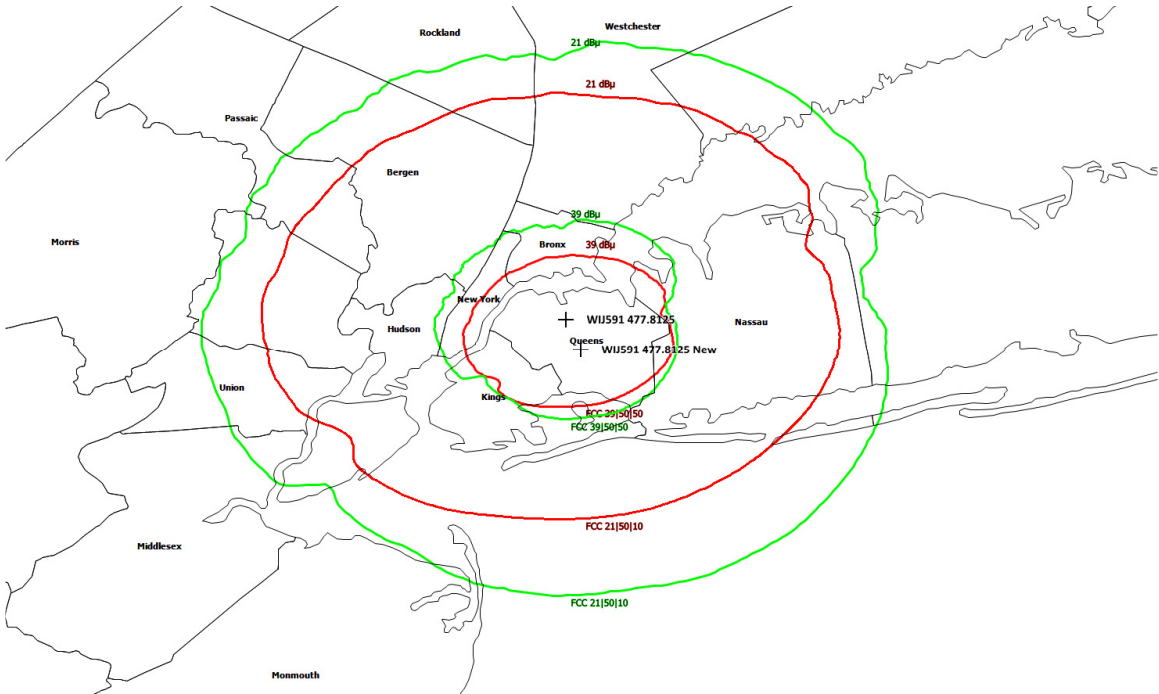
COMMON SPECIFICATIONS

Frequency (continuous)	406-512 MHz	Lightning protection	DC Ground
Power rating (typ.)	500 watts	Wind rating	175 MPH
Impedance	50 ohms	(with 0.5" ice)	150 MPH
VSWR	1.5:1 or less		
Pattern	Adjustable: Offset circular, cardioid, or bidirectional		
Termination	N-Male or 7-16 DIN (opt.) on harness feed cable		

MODEL SPECIFICATIONS	ANT450D	ANT450D3	ANT450D6-9
Gain (dependent on pattern)	1-2.5 dBd	3-6 dBd	6-9 dBd
Vertical beamwidth (3/8 wl.)	71°	34°	15°
Dimensions (H x D) (max)	13 x 12 in.	31 x 12 in.	71 x 12 in.
Weight (antenna + clamps)	6 lbs	13 lbs	18 lbs
Maximum exposed area	0.27 ft. ²	0.68 ft. ²	1.4 ft. ²
Lateral thrust at 100 MPH	11 lbs	28 lbs	60 lbs
Electrical uptilt / downtilt	N/A	1-15°	1-15°

WIJ591_477_8125_Mazza

Callsign	Lat	Lon	Ground Height	ERP	Modulation	Antenna Height	RC-AMSL	HAAT
WIJ591 477.8125	40-45-14.8 N	73-50-50.5 W	3 m	75	FM 2.5kHz	70 m	73 m	56.407 m
WIJ591 477.8125 New	40-42-42.4 N	73-49-37.5 W	26 m	20	FM 2.5kHz	100 m	126 m	114.898 m



Propagation Properties

Propagation Model	Longley Rice
Time Variability %	90
Confidence %	95
Location Variability %	90
Dielectric Constant	15
Climate Type	Continental/Temperate
Environment	---
Minimum HAAT	---

Greater than or
equal to [value].

	28.19 dBμ
	34.19 dBμ
	44.19 dBμ
	54.19 dBμ

Kilometers



